



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,000	02/28/2002	William Hopkins	Mo6835/PS-1096	1094
157	7590	11/19/2003	EXAMINER	
BAYER POLYMERS LLC 100 BAYER ROAD PITTSBURGH, PA 15205			WYROZEBSKI LEE, KATARZYNA I	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 11/19/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/086,000	Applicant(s) HOPKINS, WILLIAM	
	Examiner Katarzyna Wyrozebski Lee	Art Unit 1714	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☐ Responsive to communication(s) filed on ____.

2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) 1-13 is/are pending in the application.

4a) Of the above claim(s) ____ is/are withdrawn from consideration.

5) ☐ Claim(s) ____ is/are allowed.

6) ☒ Claim(s) 1-13 is/are rejected.

7) ☐ Claim(s) ____ is/are objected to.

8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) ☒ All b) ☐ Some * c) ☐ None of:

1. ☒ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. ____.

3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 0703.

4) ☐ Interview Summary (PTO-413) Paper No(s). ____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other:

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-7, 9-12 are rejected under 35 U.S.C. 102(b) as being anticipated by MROCZKOWSKI (US 5,162,409).

The prior art of MROCZKOWSKI discloses composition for making a tire tread comprising halobutyl rubber.

According to TABLE I of the prior art of MROCZKOWSKI, bromobutyl rubber is utilized in amount of 20 pbw balance being other synthetic rubbers including natural rubber. Mineral filler of MROCZKOWSKI is silica is utilized in amount of 20 pbw and is it used in conjunction with silane coupling agent in amount of 5.6 pbw. The composition is vulcanized utilizing sulfur-vulcanizing agent.

The specification of the prior art of MROCZKOWSKI further clearly states that the butyl rubber is either sole component of the rubber composition for the tire tread or it is mixed with natural rubber and/or synthetic rubber (col. 3, lines 46-51).

According to the specification, the coupling agent is preferably bis(triethoxysilyl) propyl tetrasulfane (col. 3, lines 43-45). Other coupling agent included in disclosure of MROCZKOWSKI is mercaptopropyl trimethoxysilane.

In the light of the above disclosure, the prior art of MROCZKOWSKI anticipates requirements of claims rejected above.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. Claims 8 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over MROCZKOWSKI (US 5,162,409) in view of SANDSTROM (US 5,087,668).

The discussion of the disclosure of the prior art of MROCZKOWSKI from paragraph 2 of this office action is incorporated here by reference.

The difference between the present invention and the disclosure of the prior art of MROCZKOWSKI is showing that the tire tread comprising halobutyl rubber can be also utilized for a shoe soles as well as a stepwise addition of the components of the composition.

With respect to the above differences the prior art of SANDSTROM discloses composition that can be utilized in making both tire treads and shoe soles (col. 1, lines 44-46).

The composition comprises mixture of rubbers that include natural rubbers and in the event that the tread composition is close to a sidewall a bromobutyl rubber (col. 10, lines 7-19), therefore use of bromobutyl in the composition is hereby rendered obvious.

The other components of the composition include reinforcing agents such as silica and carbon black with coupling agent (col. 9, lines 5-20).

In the process of SANDSTROM, silica is first pretreated with silane coupling agent and then incorporated into molten rubber (see examples).

Using composition such as that containing halobutyl rubber in shoe soles or tires and proper mixing is taught by the prior art of SANDSTROM to result in composition having improved wear and traction.

In the light of the above disclosure it would have been obvious to one having ordinary skill in the art at the time of the instant invention to utilize the composition of MROCZKOWSKI in shoe soles and thereby arrive at the present invention. The shoe soles comprising the composition of the prior art of MROCZKOWSKI would also have excellent traction (Abstract).

6. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over MROCZKOWSKI (US 5,162,409) in view of JALICS (US 5,708,053).

The discussion of the disclosure of the prior art of MROCZKOWSKI from paragraph 2 of this office action is incorporated here by reference.

The difference between the present invention and the disclosure of the prior art of MROCZKOWSKI is showing that the tire tread comprising halobutyl rubber can be also utilized in truck tire treads.

With respect to the above difference the prior art of JALICS discloses composition rubber mixture, wherein the list of rubbers contains both bromobutyl rubber and natural rubber (col. 2, lines 30-35 and examples). Since both rubbers are disclosed, their use is hereby rendered obvious.

The other components of the tire tread composition include silica (col. 3, lines 52-60) and coupling agents (col. 7).

Composition of JALICS can be utilized in a tire tread such as passenger tire (as it is in MROCZKOWSKI), aircraft tire and truck tire (col. 9, lines 59-61) as well as belts and hoses (col. 9, line 54).

The composition of JALICS as it contains the same basic components as the composition of MROCZKOWSKI is also expected to have excellent traction.

In the light of the above disclosure, it would have been obvious to one having ordinary skill in the art at the time of the instant invention to utilize the composition of MROCZKOWSKI in the truck tire such as that of JALICS. As the basic components of the composition of the two prior art disclosure overlap, the resulting tire would have the same or overlapping properties such as improved traction.

Art Unit: 1714

7. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over MROCZKOWSKI (US 5,162,409) in view of KAUSH (US 5,488,092).

The discussion of the disclosure of the prior art of MROCZKOWSKI from paragraph 2 of this office action is incorporated here by reference.

The difference between the present invention and the disclosure of the prior art of MROCZKOWSKI is showing that the tire tread comprising halobutyl rubber can be also utilized in engine mounts.

With respect to the above difference, the prior art of KAUSH discloses that the substrate for the engine mounts comprises rubbers and their mixtures. The rubbers named in the prior art of KAUSH include both natural rubber and halobutyl rubber (col. 7, lines 3-9).

Silica in the composition for engine mounts is utilized in order to prevent silicone oil from bleeding or migrating.

The composition comprising rubber mixture and silica when utilized in the engine mounts is capable of preventing silicone oil from bleeding out.

In the light of the above disclosure it would have been obvious to one having ordinary skill in the art at the time of the instant invention to utilize the composition of MROCZKOWSKI in the engine mount of KAUSH and thereby obtain the claimed invention. Use of such composition in engine mounts would not only result in silica reinforcing the rubber but also preventing silicon oil from migrating.

As of December 8th, the new phone number for the examiner of record will be (571) 272-1127.

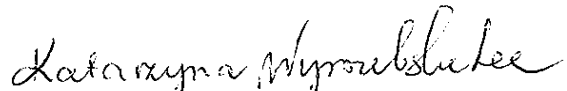
Application/Control Number: 10/086,000
Art Unit: 1714

Page 7

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski Lee whose telephone number is (703) 306-5875. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9310.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Katarzyna Wyrozebski Lee
Primary Examiner
Art Unit 1714

November 13, 2003